

Datasheet for ABIN964926
anti-STAT3 antibody (pTyr705)



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1 Image

Overview

Quantity:	100 µg
Target:	STAT3
Binding Specificity:	pTyr705
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Purpose:	STAT3 phospho Y705 Antibody
Immunogen:	Immunogen: This affinity purified Stat3 antibody was prepared by repeated immunizations with a phosphorylated synthetic peptide corresponding to the region of amino acids surrounding tyrosine 705 of human Stat3. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	Anti-STAT3 antibody is an affinity-purified antibody and is directed against the phosphorylated form of human STAT3 protein at the Y705.
Characteristics:	Synonyms: rabbit anti-STAT3 pY705 antibody, Signal transducer and activator of transcription 3, Acute-phase response factor, APRF, STAT3 phospho Y705, STAT3 (pTry705)
Purification:	Anti-Stat3 antibody was affinity purified from monospecific antiserum by immunoaffinity purification.

Product Details

Sterility: Sterile filtered

Target Details

Target: STAT3

Alternative Name: STAT3 ([STAT3 Products](#))

Background: Background: Signal transducer and activator of transcription 3 (Stat3) belongs to a family of cytoplasmic transcription factors that can be activated by phosphorylation by its cell surface receptor. Stat3 plays a key role in many cellular processes such as cell growth and apoptosis. It also mediates cellular responses to interleukins, KITLG/SCF,EGF, IFN-alpha and other growth factors and may mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4. Stat3 forms a homodimer or a heterodimer with a related family member (e.g. STAT1). Activation occurs through phosphorylation of tyrosine 705 and serine 727. Phosphorylation of Stat3 at Tyr705 induces Stat3 dimerization and nuclear translocation. Serine phosphorylation is important for stable DNA-binding of Stat3 homodimers and maximal transcriptional activity. Stat3 can have a dual role in cancer, it has been found that Stat3 protein can promote oncogenesis and have a tumor suppressor role depending upon the mutational Background of the tumor.

Gene ID: 6774

NCBI Accession: [NP_644805](#)

UniProt: [P40763](#)

Pathways: [JAK-STAT Signaling](#), [RTK Signaling](#), [Interferon-gamma Pathway](#), [Neurotrophin Signaling Pathway](#), [Dopaminergic Neurogenesis](#), [Response to Growth Hormone Stimulus](#), [Carbohydrate Homeostasis](#), [Stem Cell Maintenance](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [Feeding Behaviour](#), [CXCR4-mediated Signaling Events](#), [Signaling of Hepatocyte Growth Factor Receptor](#)

Application Details

Application Notes: Immunohistochemistry Dilution: User Optimized

Application Note: STAT3 pY705 antibody has been tested for use in ELISA, IHC, and Western Blot. Expect a band approximately 88.1 kDa in size corresponding to phosphorylated STAT3 protein by western blotting in the appropriate stimulated tissue or cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.

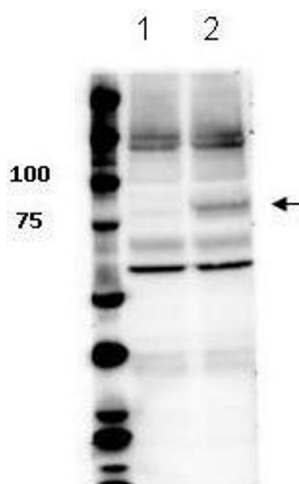
Western Blot Dilution: 1 µg/mL

ELISA Dilution: 1:10,000 - 1:30,000

Application Details

	Other: User Optimized
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	0.9 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20°C prior to opening. Aliquot contents and freeze at -20°C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Western Blot of Rabbit anti-Stat3 pY705 antibody. Lane 1: Jurkat lysate. Lane 2: Jurkat lysate IFN-α treatment. Load: 35 µg per lane. Primary antibody: STAT3 pY705 antibody at 1:1000 for overnight at 4°C. Secondary antibody: rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 88 kDa, ~90kDa for STAT3py705. Other band(s): STAT 3 pY705 splice variants and isoforms.